

Date: Thu, 6 May 93 18:58:22 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #549  
To: Info-Hams

Info-Hams Digest                      Thu, 6 May 93                      Volume 93 : Issue 549

Today's Topics:

                    Another AM Question  
                    ATV Repeater antennas  
                    Callbook server, or FTP.  
                    Call for opinions: 9913 vs. CQ-FLEXI  
                    Can TH-28 or IC-P2AT be converted for extended TX?  
                    Florida Ham's Legal Battle Over Antenna  
                    FT1000 Control Software  
                    Kenwood 741 Out of Band Problem  
                    Looking for contacts in Moldova  
                    Mobile Flourecent Interference!  
                    PVC tubing for mast?  
                    QSL info  
                    QSL ROUTE TA2BK  
                    RF "remote control" low power transmitters in the 70cm ham band!  
                    Rover Antennas  
                    Spread Spectrum use?  
                    TAKE THE NO-CODE CRAP TO ".policy"  
                    Where Can I FTP SuperMorse From?  
                    Why is .info stuff here?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----

Date: 6 May 1993 16:02:16 +0100  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!torn!nott!  
bnrgate!bnr.co.uk!uknet!warwick!warwick!not-for-mail@network.UCSD.EDU  
Subject: Another AM Question

To: info-hams@ucsd.edu

In article <C6KI1M.1xE@srigenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:

>

>For extra credit, try this problem:

>

>Consider a 1 MHz RF carrier 50% modulated with a 1000 Hz sine wave.

>I think we all agree it will have sidebands +/- 1 kHz from the carrier.

>In the receiver, include a circuit that AM modulates the signal with

>a 1000 cycle tone 180 degrees out of phase:

>

>AM signal =  $\sin(2\pi \cdot 1000000) * [\sin(2\pi \cdot 1000)/2 + 1]$

>50% modulation-----^

>

>Modulated (multiplied) by:

>

> $1 / [\sin(2\pi \cdot 1000)/2 + 1]$

Now that's a bit naughty - not only have you turned a multiply into a divide but you left the 'pi' out! Could you be trying to fool us?

>So the resulting signal is just:

>

> $\sin(2\pi \cdot 1000000)$  an unmodulated signal.

>

>Does this unmodulated signal have sidebands? If not where

>did they go?

Ah, but if we were to write out the maths properly (!), we would find that the following would happen.

Tx signal:

$$\sin(2\pi \cdot 1000000) * [1 + (\sin(2\pi \cdot 1000))/2]$$

I think (but am not sure :- ) that you intend to multiply this at the rx by:

$$[1 + (\sin(2\pi \cdot 1000 + \pi))/2]$$

But,  $\sin(x + \pi) = -\sin(x)$ .

At the output of the receiver multiplier, therefore, we are left with:

$$\sin(2\pi \cdot 1000000) * [1 + (\sin(2\pi \cdot 1000))/2] * [1 - (\sin(2\pi \cdot 1000))/2]$$

If we multiplied all this out we'd find that we get two sets of sidebands at +/- 1 KHz, of equal magnitude but in antiphase, so cancellation occurs.

What we actually get, though, isn't simply the carrier:

for simplicity use the relation  $(a+b)(a-b)=a^2 - b^2$

therefore, output is

$\sin(2\pi \times 1000000) * [1 - \sin^2(2\pi \times 1000)/4]$

$= \sin(2\pi \times 1000000) * [1 - ((1 - \cos(4\pi \times 1000))/8)]$ , using  $2\sin^2(a) = 1 - \cos 2a$ .

$= \sin(2\pi \times 1000000) * [7/8 + \cos(4\pi \times 1000)/8]$

which gives us sidebands at twice the modulation frequency, or +/- 2KHz.

>AL N1AL

Now, what was the question again?

Simon G0GWA.

-----  
Date: 6 May 93 20:54:55 GMT  
From: amdcad!angelo!clark@decwrl.dec.com  
Subject: ATV Repeater antennas  
To: info-hams@ucsd.edu

derry@NeXtWork.Rose-Hulman.Edu (John Derry) writes:

>What kind of antennas are in use for ATV repeaters with horizontal  
>polarization? Are there any commercial models available?

You might look at Alford slot antennas. There was an ad for one in  
the last Spec-Com...

I have used one, and they work, if they're tuned correctly. I assume  
you're looking for omnidirectional antennae with a little bit of gain.

You might also want to look at an "egg-beater" design. They work  
pretty well, too, especially if they have a reference ground plane  
1/4 wavelength down the mast.

73 es GL

Brad // NP4AI

>tnx es 73 de K9CUN, Jack

-----  
Date: Thu, 6 May 1993 19:24:52 GMT  
From: panix!kb7uv@nyu.arpa  
Subject: Callbook server, or FTP.  
To: info-hams@ucsd.edu

There is a US Callbook available via the Internet --

telnet ham.njit.edu 2000

Chris, WG2W, (cdp@hertz.njit.edu) is in some way involved with this service. But, please don't flood his email box with questions!

73, Andy

--

```
----- Andrew Funk, KB7UV -----  
|      Chair, Radio Amateur Telecommunications Society (RATS)      |  
| ENG Editor/Microwave Control, WCBS-TV Channel 2 News, New York |  
| Internet: kb7uv@panix.com      Packet: kb7uv@kb7uv.#nli.ny.usa |
```

-----  
Date: 6 MAY 93 14:05:45  
From: pa.dec.com!oct17.dfe.dec.com!ryn.mro4.dec.com!est.enet.dec.com!  
randolph@decwrl.dec.com  
Subject: Call for opinions: 9913 vs. CQ-FLEXI  
To: info-hams@ucsd.edu

In article <1993May6.050612.24949@nntpd2.cxo.dec.com>, little@nuts2u.enet.dec.com (nuts2u::little) writes...

>slp9m@cc "slp9m@cc.usu.edu" writes:

>Along the same lines, has anyone had experiece using 9913 right at the  
>antenna, i.e. not using a more flexible cable from the antenna to the  
>tower? Several folks in this area have suggested that its flexible  
>enough to do that, but I'm a bit skeptical.

>Todd

>N9MWB

Yah, I home-brewed a 2m beam antenna (Log-Yagi), and fed it all the way with 9913-equivalent coax for test purposes... I wouldn't (and didn't) leave it that way, cuz the flexing from the rotator will break the center conductor eventually. I've been using BNC connectors made for RG213 on it, and gooping them with RTV, then wrapping with electrical tape. No leaks so far, about 2 months. -Tom R. N100Q

-----  
Date: Thu, 6 May 93 14:27:00 GMT

From: usc!howland.reston.ans.net!news.ans.net!nynexst.com!  
rsilvers@network.UCSD.EDU  
Subject: Can TH-28 or IC-P2AT be converted for extended TX?  
To: info-hams@ucsd.edu

I need a compact HT that can be converted to transmit marine frequencies. Can the IC-P2AT or TH-28 be modified for this? Are these both good choices in general? Which has better quality? Battery life?

Thanks,

--Rob

-----  
Date: Thu, 6 May 93 17:26:02 GMT  
From: pacbell.com!att-out!walter!porthos!dancer!whs70@network.UCSD.EDU  
Subject: Florida Ham's Legal Battle Over Antenna  
To: info-hams@ucsd.edu

In article <1s9pl3\$e84@network.ucsd.edu> jgervais@weber.ucsd.edu (Joe Gervais ) writes:

>A few months ago there was a ham in Florida who apparently  
>was having serious legal troubles regarding (I believe) their  
>antenna. Has anyone heard anything of his/her current plight?

I spoke directly with the ham involved a few weeks ago. Here's my understanding of where things are at:

The case is strictly a "civil" matter involving the ham(s), the neighbors and the "sub-division" deed restriction. The affected ham's residence is a single family detached dhome on one acre.

The deed restrictions have NO antenna restrictions, BUT there is a broad restriction against noxious/annoying/etc. activity. It is under that broad restriction that the judge has ruled in favor of the neighbors who complained against the tower AND the actual amateur radio transmissions by the ham.

At this time, the ham has been ordered by the judge to (1) remove the tower AND (2) cease ALL amateur transmission from the premises. The case is now being appealed and will likely take some time before anything else happens.

For clarification, I again point out that this situation does NOT involve any restrictive town/city ordinances or laws which PRB-1 could be used against. The most threatening aspect of this case is that, if it stands, other deed restricted subdivision homeowners may try to have a similar "ban" against ALL amateur

transmissions using the same argument that ham transmissions are annoying, threatening, etc. Given the hyper-fear of electromagnetic radiation these days, that could also become a battle cry of neighbor against ham in the future. (Note, this entire post is my "understanding" of the current situation. If anyone has additional details or any correction to what I've posted, please post to the newsgroup.)

Please also direct any follow-ups to the "policy" newsgroup to which I've cross-posted this response.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

-----  
Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)  
Morristown, NJ                      email via UUCP              bcr!cc!whs70  
201-829-2879 Weekdays              email via Internet      whs70@cc.bellcore.com

-----  
Date: 6 May 93 19:23:44 GMT  
From: apple!apple!mumbo.apple.com!gallant.apple.com!dickallens-fx.apple.com!  
user@decwrl.dec.com  
Subject: FT1000 Control Software  
To: info-hams@ucsd.edu

Does anyone know of public domain software for controlling the Yaesu FT1000 HF transceiver?

Dick Allen AA6UZ  
Apple Computer, Inc.  
rallen@apple.com

-----  
Date: 6 May 93 22:15:01 GMT  
From: ogicse!emory!europa.eng.gtefsd.com!darwin.sura.net!rouge!  
jpd@network.UCSD.EDU  
Subject: Kenwood 741 Out of Band Problem  
To: info-hams@ucsd.edu

The consensus of those discussing the TM741A mods some time back, was that if you removed R54 and R55, you should also CUT the green wire. Kenwood had printed some instructions that said to not to cut it, but the result was poor sensitivity, birdies, etc. Perhaps this is related to your problem?

73,

--

-- James Dugal,      N5KNX                      Internet: jpd@usl.edu  
Associate Director      Ham packet: n5knx @k5arh (land), U0-22 (sat.)

Computing Center            US Mail: PO Box 42770   Lafayette, LA   70504  
University of Southwestern LA.   Tel. 318-231-6417   U.S.A.

-----  
Date: Thu, 6 May 1993 18:31:29 GMT  
From: swrinde!elroy.jpl.nasa.gov!sdd.hp.com!nigel.msen.com!yale.edu!  
newsserver.jvnc.net!howland.reston.ans.net!darwin.sura.net!gatech!gsusgi1.gsu.edu!  
gsusgi1.gsu.edu!ecfsam@network.UCSD.EDU  
Subject: Looking for contacts in Moldova  
To: info-hams@ucsd.edu

I'm looking for contacts in Moldova (formerly Rep. of Moldavia). I would really like to find Internet contacts in Kishinev, but will settle for a ham radio link. I have some personal messages that I would love to get through, but the mail system is gone and, short of going there, it seems that there is no way to get any news through.

If you have or know of someone in that country that can help, please E-mail me. Thanks in advance.

-Steve Matta  
ecfsam@gsusgi2.gsu.edu

-----  
Date: Thu, 6 May 1993 21:18:16 GMT  
From: usc!sol.ctr.columbia.edu!news.kei.com!news.oc.com!csci-wiermac.etsu.edu!  
user@network.UCSD.EDU  
Subject: Mobile Flourecent Interference!  
To: info-hams@ucsd.edu

In article <1993May6.082743.23357@usl.edu>, jab0684@ucs.usl.edu (Boudreaux Jean A) wrote:

>  
> Well actually I think it's not flourecent but actually neon lights they  
> use. As I recall neon lights typically require high voltage transformers  
> to supply them with several thousand volts to operate. I suspect this  
> is the soucre of the 'hash' you were receiving.  
>  
> 73 DE kb5udf  
>  
> kb5udf@ucs.usl.edu

We are seeing these here in this college town as well - I've probably seen 3 cars with them so far. I do believe they are of the neon variety - so far I've seen blues and greens.

One car had so many tubes of it that it looked somewhat like the DeLorean from "Back to the Future" going into timewarp :-)

I didn't have the rig on though, so don't know about the interference. Actually if this is common I'm a little disappointed. I saw one car with a tube around the back license plate (green) which looked like it might be kind of a nice safety feature (similar to the high level brake lights you see). These things must be pretty commonly available. Anyone know where they are coming from?

(Pep boys, etc?)

===== insert usual disclaimers here =====

Bob Wier, East Texas State U., Commerce, Texas  
wier@merlin.etsu.edu (watch for address change)

-----  
Date: 6 May 93 20:01:29 GMT  
From: sdd.hp.com!ux1.cso.uiuc.edu!rtaylor@decwrl.dec.com  
Subject: PVC tubing for mast?  
To: info-hams@ucsd.edu

markm@bigfoot.sps.mot.com (Mark Monninger) writes:

>Does anyone have any experience using PVC tubing for antenna support  
>masts? I'm thinking of putting up an inverted-vee and would like to get  
>the apex up 40 feet or higher. I have heard of people using PVC tubing to  
>construct masts but have never heard any details about it. Is schedule 40  
>rigid enough? What diameter would be required? How well does it hold up?

I tried 20 foot sections of 3 inch white PVC pipe to hold up the legs of a long wire V-Beam. BIG mistake. It bends like a noodle in time and is now guyed to try to keep it straight.

-----  
Date: Thu, 6 May 1993 20:51:16 GMT  
From: concert!unccsun.uncc.edu!ws24!scshivas@decwrl.dec.com  
Subject: QSL info  
To: info-hams@ucsd.edu

Can some one email to me the address of VU2GX from the international call book. His name is K.G. Girimaji.

Please send the QSL info to me direct at scshivas@mosaic.uncc.edu



Thanx in advance

Satish (KD4SOP)

University of North Carolina At Charlotte

-----  
Date: Thu, 6 May 1993 14:45:30 GMT  
From: agate!howland.reston.ans.net!torn!nott!bnrgate!bnr.co.uk!uknet!pipex!  
zaphod.crihan.fr!univ-lyon1.fr!ghost.dsi.unimi.it!barp@ames.arpa  
Subject: QSL ROUTE TA2BK  
To: info-hams@ucsd.edu

Keith Poole <kp2a+@andrew.cmu.edu> writes:

>I talked to TA2BK who said to QSL via 1992 Callbook address -- which says  
>to QSL via DJUJ. Can someone tell me what DJUJ is? Thanks.

I think is a printing error hi hi hi.  
73's

Andy ik2qcc

ik2qcc@n0ary (packet)  
barp@ghost.dsi.unimi.it (internet)

-----  
Date: 6 May 93 21:43:21 GMT  
From: netcomsv!netcom.com!wa2ise@decwrl.dec.com  
Subject: RF "remote control" low power transmitters in the 70cm ham band!  
To: info-hams@ucsd.edu

On page 55 of the May 93 RF Design magazine, there is a product announce-  
ment for a small transmitter device for remote control applications.  
Operates on 433.92MHz That's in the ham band! Near/in the ATV area?  
Company name is RF Monolithics, Inc, no address given, just an Info card  
number.

-----  
Date: 5 May 93 23:02:37 EDT  
From: usc!howland.reston.ans.net!darwin.sura.net!udel!news.intercon.com!psinntp!  
arrl.org@network.UCSD.EDU  
Subject: Rover Antennas  
To: info-hams@ucsd.edu

I know we have a month to go before the June VHF contest, but perhaps people might benefit from these questions?

What are the best paints to use on microwave antennas? I'd like to put something like "Amateur Radio" on my dish antennas so people don't have to ask :-).

Our books suggest a stacking distance for antennas of different bands of half the boom length or a multiple of a half wavelength of the smaller array. However, I'm thinking of a better approach. Suppose we calculate the apertures of the individual antennas and keep objects likely to interfere with out of the aperture. Thus, you would keep an F0-22 22 el 432 yagi at least 2.6 feet away from the other antennas. By comparison, half a wavelength would be 1.1 feet, which is too little in my experience. Half the boom length seems a bit excessive (7 ft.), but does computer modeling show otherwise?

Finally, why can't a sports car be used for mountain topping? I thought they are suppose to excel on twisty mountain roads. I don't know about you, I'd rather be moving with traffic than going at 45 mph in an underpowered van, particularly if the great spot is 300 miles away.

Granted, they aren't designed for off road use, but I've not heard of a serious VHF group that uses a site that doesn't have some sort of usable access road. And for a rover station, it might not pay to spend the extra time getting to really great spots. Equipment performance has gotten to the point where line of sight often isn't necessary. The CT mountain park access roads were still closed for the winter, so I went to the beach park (its open because they charge for parking). So, 30 ft. above sea level I work a new grid--FM19, about 265 miles away on 1296 MHz with 10 watts.

I don't see space being a problem--I'm pretty sure you can fit my 432 MHz to 10 GHz station into a Toyota Supra, though squeezing big 2 and 6 meter antennas might be a problem. But, rover stations are probably better off with manageable antennas.

Hope to "share" Equinox with the auto race and W1TKZ in June.

Zack Lau KH6CP/1

Internet: zlau@arrl.org "Working" on 24 GHz SSB/CW gear  
Operating Interests: 10 GHz CW/SSB/FM  
US Mail: c/o ARRL Lab 80/40/20 CW  
225 Main Street Station capability: QRP, 1.8 MHz to 10 GHz  
Newington CT 06111 modes: CW/SSB/FM/packet  
amtor/baudot  
Phone (if you really have to): 203-666-1541

-----  
Date: Thu, 6 May 1993 16:00:21 GMT  
From: swrinde!elroy.jpl.nasa.gov!sdd.hp.com!zaphod.mps.ohio-state.edu!  
cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!fstop.csc.ti.com!linnig@network.UCSD.EDU  
Subject: Spread Spectrum use?  
To: info-hams@ucsd.edu

In article <monty.736661851@pv070b.vincent.iastate.edu> monty@iastate.edu (Joel B Montgomery) writes:

> I've done this on the 440 band and it works nicely. Why 440?? Well  
> I had the RF stuff for free. Why did I do it?? Well, 'cuz I wanted to  
> see the advantages of SS and because I had a class in it.

Great!

Tell me (and the net) more. Is it bigger than a bread box? What radio  
equipment did you use as the starting point? How did you solve the  
synch problems between units?

Spread Spectrum just looks like the kind of technology we could use as a fall  
back position when the FCC wants to take a band away. Perhaps we could have  
talked the FCC into letting hams keep that (now missing) 2Mhz portion of the  
220 band as a SS only secondary allocation instead of losing it altogether.

73,

-- Mike, N5QAW

-----+-----+  
Mike Linnig, Texas Instruments Inc. | 97.43% of all statistics are made |  
Phone: (214) 575-3597 | up; most of them (83.6 percent) |  
Internet: mike.linnig@dseg.ti.com | are wrong. |  
-----+-----+  
-----

Date: Thu, 6 May 93 16:23:58 GMT  
From: mentor.cc.purdue.edu!noose.ecn.purdue.edu!en.ecn.purdue.edu!n9ljx@purdue.edu

Subject: TAKE THE NO-CODE CRAP TO ".policy"  
To: info-hams@ucsd.edu

In article <930505.220512.1r6.rusnews.w165w@garlic.sbs.com> system@garlic.sbs.com  
(Anthony S. Pelliccio) writes:

>randall@informix.com (Randall Rhea) writes:

>

>> The whole point of creating rec.radio.amateur.policy was  
>> to remove the no-code debate from the .misc group. Please  
>> use the .policy group as it was intended. The rest  
>> of us are sick and tired of debating a topic that was both  
>> resolved and warn-out two years ago.

>>

>> 73 DE KK6MY

>

>Just out of curiosity, ever hear of a kill file?

>

>73, Tony

>

Why should I have to waste my time and effort to filter out this crap when  
it makes absolutely no sense to deabte it!!!! As my kill file grows it takes  
longer and longer to acess and read news.

Just out of curiosity, ever hear of a life?

--scott

--

Scott Stambaugh - N9LJX                   internet: n9ljx@ecn.purdue.edu  
Operations Supervisor, ADPC               phone:     317 494 7946  
Purdue University  
West Lafayette, IN 47907-1061

-----  
Date: Thu, 6 May 1993 18:10:41 GMT

From: swrinde!cs.utexas.edu!usc!howland.reston.ans.net!sol.ctr.columbia.edu!

usenet.ucs.indiana.edu!py120-726489.ucs.indiana.edu!user@network.UCSD.EDU

Subject: Where Can I FTP SuperMorse From?

To: info-hams@ucsd.edu

SuperMorse can be found on SIMTEL20.ARMY.MIL in the HAMRADIO directory.  
Good luck with your code.

In article <1sbe4iINNfc9@crcnis1.unl.edu>, rlosee@unl.edu (Robert Losee)  
wrote:

>

> Subject line says most of it. I've heard it's a good program but I  
> can't find a reference for it even on our Archie server. Can someone

> post an FTP address for it?

>

> --

> \*-----\*

> Robert D. Losee                      BITNET: ucas402@unlvm  
> University of Nebraska              Internet: rlosee@unlinfo.unl.edu  
> Lincoln NE 68588-0496              Phone: (402) 472-7663

-----  
Date: 6 May 93 14:34:02 GMT

From: mvb.saic.com!unogate!news.service.uci.edu!usc!cs.utexas.edu!uwm.edu!msuinfo!  
netnews.upenn.edu!prijat!triangle.cs.uofs.edu!bill@network.UCSD.EDU

Subject: Why is .info stuff here?

To: info-hams@ucsd.edu

In article <1993May5.142626.28646@VFL.Paramax.COM>, rossi@VFL.Paramax.COM (Pete Rossi) writes:

|>

|> Also, Why are there duplicate postings of ARRL bulletins, satellite elements,  
|> DX bulletins, etc, from multiple sources? Once is enough!!

|>

For the majority of most of that "information" once is more than enough.

bill KB3YV

--

Bill Gunshannon                      | "There are no evil thoughts, Mr. Reardon" Francisco  
bill@cs.uofs.edu                      | said softly, "except one; the refusal to think."  
University of Scranton                |  
Scranton, Pennsylvania                |                #include <std disclaimer.h>

-----  
Date: Thu, 6 May 1993 03:31:25 EST

From: anomaly.sbs.com!kd1nr!news@uunet.uu.net

To: info-hams@ucsd.edu

References <C6Fp4o.F2L@news.Hawaii.Edu>,  
<930503.162837.6v1.rusnews.w165w@garlic.sbs.com>,  
<1993May4.214110.9163@news.nd.edu>.net

Subject : Re: no-code defense

rnimtz@hilbert.helios.nd.edu (richard nimtz) writes:

> In article <930503.162837.6v1.rusnews.w165w@garlic.sbs.com> system@garlic.sbs  
> .com (Anthony S. Pelliccio) writes:

```
>>jherman@uhunix.uhcc.Hawaii.Edu (Jeff Herman) writes:
>>
>>> So, ladies and gentlemen, why don't we take an informal poll here on
>>> the net: give your callsign and state whether you support the no-code
>>> license or feel it was a bad idea. I'll start:
>>>
>>> I'm NH6IL and I'm against the no-code license.
>>
>> I'm KD1NR and I'm against the no-code license.
>>
> I'm N9??? (the license is in the mail) and for no-code.
```

Gee, should that last one surprise us? {sigh}

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-----
Tony Pelliccio kd1nr/ae "Usenet is like a herd of performing elephants
*!*****!*****!*****!*****!*****!*****!*****!*****!*"
system@garlic.sbs.com with diarrhea -- massive, difficult to
redirect, awe-inspiring, entertaining, and a
source of mind-boggling amounts of excrement
when you least expect it." --spaf (1992)
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End of Info-Hams Digest V93 #549
*****
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